

# BAQP AMBIENT MONITORING GUIDELINES

## SUMMARY OF CHANGES

**The first revision of the Bureau of Air Quality Planning 2006 ambient monitoring guidelines was published on September 17, 2015.**

### **Changes in the version published on October 27, 2015**

#### **Section 3.2, Wind Direction**

There is further discussion about the algorithms used to calculate mean wind direction. NDEP strongly recommends the use of the unit vector calculation vs. the scalar approach (also known as single-pass procedure developed by Mitsuta). Also, for the unit vector calculation of mean wind direction, which the *Quality Assurance Handbook, Vol. IV, Meteorological Measurements, Version 2.0 (Final)* (2008) concludes should be used, the *Meteorological Monitoring Guidance for Regulatory Modeling Applications* (2000) recommends a sampling rate of one to five seconds. The single-pass procedure developed by Mitsuta to compute scalar mean wind direction requires a sampling rate of at least once per second to ensure that consecutive values do not differ by more than 180 degrees.

#### **Section 3.6, Sampling Frequency**

The BAQP reserves the right to reject wind direction measurements obtained using the scalar Mitsuta method with a sampling interval greater than one second.

#### **Section 5.1, High-Volume PM<sub>10</sub> Sampling**

Reweighed unexposed filters should be within  $\pm 2.8$  mg of original values. If reweighed exposed filters differ by more than 5.0 mg from original values, the laboratory supervisor should investigate why.

### **Changes in the version published on March 15, 2016**

#### **Section 2, Highlights, No. 8**

Hourly *shelter* temperature or instrument rack temperature shall be reported for gaseous analyzers.

#### **Section 5.3, Gaseous Monitoring**

The *shelter* temperature or instrument rack temperature shall be monitored and reported quarterly as hourly averages, with the analyzer model and EPA-designated temperature range for that analyzer to be operated as a Federal Reference or Equivalent Method.